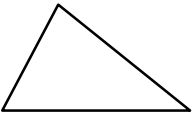
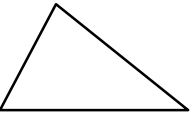
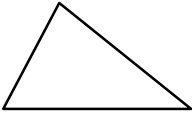
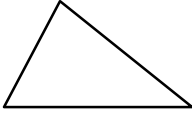


## Chapter 5 Triangle Centers

1. What does “concurrent” mean? Draw three concurrent lines.
  
2. Fill in the blanks with “a midpoint” or “a vertex” to make the statement true:
  - a. A midsegment goes from \_\_\_\_\_ to \_\_\_\_\_.
  - b. A median goes from \_\_\_\_\_ to \_\_\_\_\_.
  - c. An altitude goes from \_\_\_\_\_ and is perpendicular to the opposite side.
  - d. A perpendicular bisector goes from \_\_\_\_\_, bisects the side, and is perpendicular to it.
  - e. An angle bisector goes from \_\_\_\_\_ and bisects the angle.

3. Complete the chart:

Type of Line	Draw the line	Name of Center	Purpose of Center
Perpendicular bisector			
Angle bisector			
Median			
Altitude			

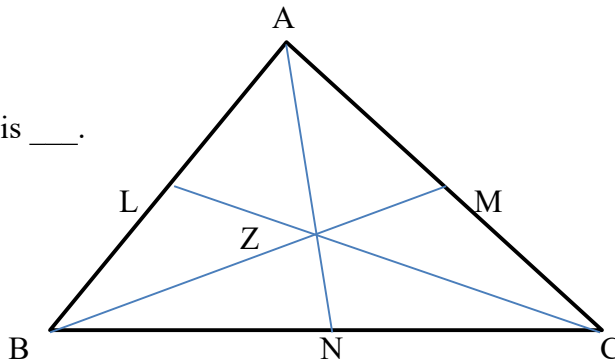
4. Where is the circumcenter of a right triangle *ALWAYS* located?

5. The medians of a triangle are concurrent at a point that is \_\_\_\_\_ of distance from the vertex to the midpoint of the opposite side.

6. The lines inside the triangle are medians.

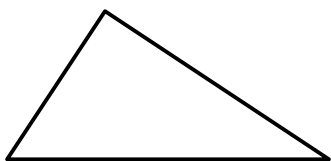
Find the length of each segment:

- a. If AN is 12, then AZ is \_\_\_\_\_ and ZN is \_\_\_\_\_.
- b. If MC is 8, AC is \_\_\_\_\_.
- c. If LZ is 5, ZC is \_\_\_\_\_.

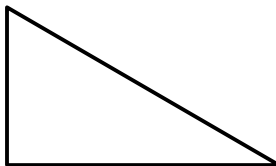


14. Draw the altitude to the base for each triangle.

a. Acute



b. Right



c. Obtuse

